

**IN THE CLAIMS:**

Please amend the claims, without prejudice, without admission, without surrender of subject matter and without any intention of creating any estoppel as to equivalents as follows:

1-19 (Cancelled)

20. (Currently Amended) An isolated equine GM-CSF polypeptide of equine or synthetic origin which has an adjuvant effect, immunity stimulant activity, and species-specificity as that of Isolated equine GM-CSF as set forth in SEQ ID NO:9.

21. (Currently Amended) The isolated equine GM-CSF polypeptide of claim 20 having an amino acid sequence as set forth in SEQ ID NO:9.

22. (Currently Amended) An isolated equine GM-CSF polypeptide which has an adjuvant effect, immunity stimulant activity, and species-specificity as that of equine GM-CSF as set forth in SEQ ID NO:9 The isolated equine GM-CSF of claim 20 wherein the isolated equine GM-CSF polypeptide is obtained from expression by a vector that contains an isolated DNA molecule encoding the equine GM-CSF polypeptide having the adjuvant effect, immunity stimulant activity and species-specificity as that of equine GM-CSF as set forth in SEQ ID NO:9.

23. (Currently Amended) The isolated equine GM-CSF polypeptide of claim 22 wherein the isolated DNA molecule has a nucleotide sequence as set forth in SEQ ID NO:8.

24. (Currently Amended) The isolated equine GM-CSF polypeptide of claim 22 wherein the isolated DNA molecule has a nucleotide sequence having 90% sequence identity to SEQ ID NO:8 and encodes the polypeptide having an adjuvant effect, immunity stimulant activity, and species-specificity as that of equine GM-CSF as set forth in SEQ ID NO:9.

25. (Currently Amended) The isolated equine GM-CSF polypeptide of claim 22 wherein the isolated DNA molecule has a nucleotide sequence having 92% sequence identity to SEQ ID NO:8 and encodes the polypeptide having an adjuvant effect, immunity stimulant activity, and species-specificity as that of equine GM-CSF as set forth in SEQ ID NO:9.

26. (Currently Amended) The isolated equine GM-CSF polypeptide of claim 22 wherein the isolated DNA molecule has a nucleotide sequence having 95% sequence identity to SEQ ID NO:8 and encodes the polypeptide having an adjuvant effect, immunity stimulant activity, and species-specificity as that of equine GM-CSF as set forth in SEQ ID NO:9.

27. (Currently Amended) A An equine immune stimulation composition comprising a veterinarily acceptable excipient or vehicle and the isolated equine GM-CSF polypeptide of any one of claims 20-26 or 44.

28. (Cancelled)

29. (Currently Amended) A method of immune stimulation of an equine comprising administering to a the equine subject the composition of claim 27.

30. (Currently Amended) A method of immune stimulation of an equine comprising administering to a the equine subject the equine-GM-CSF polypeptide of ~~claim~~ any one of claims 20-26 or 44.

31. (Cancelled)

32. (Cancelled)

33. (Cancelled)

33. (Cancelled)

34. (Cancelled)

35. (Cancelled)

36. (Cancelled)

37. (Cancelled)

38. (Cancelled)

39. (Cancelled)

40. (Cancelled)

41. (Cancelled)

42. (Cancelled)

43. (Cancelled)

44. (New) An isolated equine GM-CSF polypeptide having an amino acid sequence as set forth in SEQ ID NO:9, wherein the isolated polypeptide is obtained from expression by a vector that contains and expresses an isolated DNA molecule encoding the isolated equine GM-CSF polypeptide.